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CLAIM AMENDMENTS

- 9. (Currently amended) A process for microbial leaching of a sulfidic material, the process comprises the steps of:
 - a) preparing an aqueous leaching fluid consisting of at least one sulfur-containing amino acid selected from the group consisting of cysteine, methionine, homocysteine, and and/or amides and esters, thereof, and optionally a <u>buffer</u> one or more salts;

optionally, bacteria of the genus Thlobacillus,

- b) contacting said fluid with the sulfidic material for a length of time sufficient to achieve leaching,
 - wherein bacteria of the genus *Thiobacillus* are either a component of the aqueous leaching fluid of step (a) or, the bacteria are added to a discharging fluid, wherein said discharging fluid comprises the aqueous leaching fluid resulting from the performance of step (b).
- 10. (Previously presented) The process of claim 9 wherein the leaching fluid includes the bacteria.
- 12. (Previously presented) The process of claim 9 wherein the bacteria are added to the discharging fluid.
- 13. (Currently amended) The process of claim 9 wherein, the total concentration of the at least one sulfur-containing amino acid or amide or ester derivatives thereof, is equal to or less than 8 X 10³ M.

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- 14. (Previously presented) The process of claim 9 wherein the pH of the leaching fluid is between 1 and 4.
- 15. (Previously presented) The process of claim 14, wherein the pH of the leaching fluid is between 1.5 to 2.
- 16. (Previously presented) The process of claim 9, wherein the bacteria are *Thiobacillus ferrooxidans*.
- 19. (Currently amended) The process of claim 9, wherein the at least one sulfureentaining amino acid is an amide, an ester, or mixture thereof. aqueous
 leaching fluid consists of a mixture of sulfur-containing amino acids or their
 amides and esters, the sulfur-containing amino acids being selected from the
 group consisting of cysteine, methionine, homocysteine, and/or amides and esters
 thereof, and optionally a buffer.
- 20. (Canceled)
- 21. (Currently amended) A process for microbial leaching of a sulfidic material, wherein the process comprises the steps of:
 - a) preparing an aqueous leaching fluid consisting of at least one sulfur-containing amino acid selected from the group consisting of cysteine, methionine, homocysteine, and and/or amides and esters, thereof, bacteria of the genus *Thiobacillus*, and optionally one or more salts; and
 - b) contacting said aqueous leaching fluid with the sulfidic material for a period of time sufficient to achieve leaching.
- 22. (New) The process of claim 9, wherein the leaching fluid consists of at least one amide or ester of a sulfur containing amino acid selected from the group of methionine, cysteine, and homocysteine, and optionally, a buffer.
- 23. (New) The process of claim 21, wherein the total concentration of the at least one sulfur-containing amino acid or the amid or ester ther of, is equal to or I so than 8 X 10°M.

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24. (New) The process of claim 21, wherein the leaching fluid consists of at least one amide or ester of a sulfur containing amino acid selected from the group of methionine, cysteine, and homocysteine.